UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

# NOTICE OF ALLOWANCE AND FEE(S) DUE

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02/22/2008

THE CULBERTSON GROUP, P.C. 1114 LOST CREEK BLVD. SUITE 420 AUSTIN, TX 78746

EXAMINER				
TAT, BINH C				
ART UNIT	PAPER NUMBER			
2025				

DATE MAILED: 02/22/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/915,437	07/26/2001	Sang Hoo Dhong	956.1061	7370

TITLE OF INVENTION: METHOD OF LOGIC CIRCUIT SYNTHESIS AND DESIGN USING A DYNAMIC CIRCUIT LIBRARY

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	05/22/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

### PART B - FEE(S) TRANSMITTAL

### Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where m

appropriate. All further indicated unless correct maintenance fee notification.	ed below or directed otl	ng the Patent, advance of herwise in Block 1, by (	orders and notification of (a) specifying a new corr	maintenance fees espondence address	will be ; and/o	mailed to the current or (b) indicating a separ	correspondence address as rate "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
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1114 LOST CRI SUITE 420		P.C.	I h St ad tra	ereby certify that the stes Postal Service of dressed to the Mai	nis Fee( with suf 1 Stop	e of Mailing or Transness  (s) Transmittal is being fficient postage for first ISSUE FEE address  (1) 273-2885, on the day	deposited with the United t class mail in an envelope above, or being facsimile
AUSTIN, TX 78	8746						(Depositor's name)
							(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTO	R	ATTC	DRNEY DOCKET NO.	CONFIRMATION NO.
09/915,437	07/26/2001	•	Sang Hoo Dhong			956.1061	7370
TITLE OF INVENTION	N: METHOD OF LOGIC	CIRCUIT SYNTHESIS	AND DESIGN USING A	DYNAMIC CIRC	UIT LII	BRARY	
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	<b>\$</b> 0		\$1740	05/22/2008
EXAM	MINER	ART UNIT	CLASS-SUBCLASS				
TAT, E	BINH C	2825	716-018000				
<ol> <li>Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).</li> <li>Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.</li> <li>"Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.</li> </ol>			(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,  (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to				
PLEASE NOTE: Un	less an assignee is ident th in 37 CFR 3.11. Com	tified below, no assignee	T a substitute for filing a (B) RESIDENCE: (CIT	patent. If an assign n assignment. Y and STATE OR	COUNT	TRY)	ocument has been filed for
Please check the appropri	riate assignee category or	r categories (will not be p	rinted on the patent):	Individual 🗖 C	orporat	ion or other private gro	up entity Government
4a. The following fee(s)	are submitted:	4	b. Payment of Fee(s): (Pl	ease first reapply a	ny prev	viously paid issue fee s	hown above)
Issue Fee			☐ A check is enclosed.				
☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies			Payment by credit card. Form PTO-2038 is attached.  The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).				iciency, or credit any
5. Change in Entity Sta	tus (from status indicate	d above)	overpayment, to Dep	oosit Account Nume	er	(eliciose all	extra copy of this form).
	a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.						
NOTE: The Issue Fee an interest as shown by the	nd Publication Fee (if req records of the United Sta	uired) will not be accepte ites Patent and Trademarl	ed from anyone other than k Office.	the applicant; a reg	istered	attorney or agent; or the	e assignee or other party in
Authorized Signature	;			Date			
· ·							
This collection of inform	This collection of information is required by 37 CED 1.311. The information is required to obtain or retain a banefit by the public which is to file (and by the LISDTO to process).						
an application. Confiden submitting the complete this form and/or suggest Box 1450, Alexandria, V Alexandria, Virginia 223	duality is governed by 35 dapplication form to the ions for reducing this bu Virginia 22313-1450. DO 313-1450.	OU.S.C. 122 and 37 CFR E USPTO. Time will vary rden, should be sent to th D NOT SEND FEES OR	1.14. Inis collection is e y depending upon the ind ne Chief Information Offi COMPLETED FORMS	sumated to take 12 ividual case. Any ccer, U.S. Patent and TO THIS ADDRES	minute: ommen Trader S. SEN	s to complete, including ts on the amount of tin nark Office, U.S. Depa D TO: Commissioner f	by the CST TO to process) g gathering, preparing, and he you require to complete rtment of Commerce, P.O. or Patents, P.O. Box 1450,

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

OMB 0651-0033

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09/915,437	07/26/2001	Sang Hoo Dhong	956.1061	7370	
35236 7:	590 02/22/2008		EXAM	INER	
THE CULBERTSON GROUP, P.C.			TAT, E	INH C	
1114 LOST CREE	CK BLVD.		ART UNIT	PAPER NUMBER	
SUITE 420 AUSTIN, TX 7874	46		2825 DATE MAILED: 02/22/200	8	

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 915 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 915 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)	
	09/915,437	DHONG ET AL.	
Notice of Allowability	Examiner	Art Unit	
	BINH C. TAT	2825	
The MAILING DATE of this communication app All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85 NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in or other appropriate commeter (IGHTS). This application is a	n this application. If not included unication will be mailed in due course. <b>THIS</b>	
1. This communication is responsive to <u>12/18/07</u> .			
2. ☑ The allowed claim(s) is/are <u>1-7,13 and 15-18</u> .			
<ul> <li>3. Acknowledgment is made of a claim for foreign priority u</li> <li>a) All b) Some* c) None of the:</li> <li>1. Certified copies of the priority documents have</li> <li>2. Certified copies of the priority documents have</li> <li>3. Copies of the certified copies of the priority do</li> </ul>	e been received. e been received in Applicatio	on No	
International Bureau (PCT Rule 17.2(a)).		3 11	
* Certified copies not received:			
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  4.   A SUBSTITUTE OATH OR DECLARATION must be subm	MENT of this application.  nitted. Note the attached EX.	AMINER'S AMENDMENT or NOTICE OF	
INFORMAL PATENT APPLICATION (PTO-152) which giv	es reason(s) why the oath o	r declaration is deficient.	
5. CORRECTED DRAWINGS ( as "replacement sheets") mu			
(a) including changes required by the Notice of Draftspers	<del>-</del>	v ( PTO-948) attached	
1)  hereto or 2) to Paper No./Mail Date			
(b) ☐ including changes required by the attached Examiner Paper No./Mail Date			
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t			
<ol> <li>DEPOSIT OF and/or INFORMATION about the depo- attached Examiner's comment regarding REQUIREMENT</li> </ol>			
Attachment(s) 1. ☐ Notice of References Cited (PTO-892)	5. ☐ Notice of Ir	formal Patent Application	
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)	6. ☐ Interview S	ummary (PTO-413),	
3. ☐ Information Disclosure Statements (PTO/SB/08),	Paper No. 7.	/Mail Date Amendment/Comment	
Paper No./Mail Date  4.  Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. <b>⊠</b> Examiner's	Statement of Reasons for Allowance	
or biological material	9. 🔲 Other		

Application/Control Number: 09/915,437 Page 2

Art Unit: 2825

### **DETAILED ACTION**

## Reasons for Allowance

The following is an examiner's statement of reasons for allowance:

I. Claims 1-7, 13, and 15-18 are allowed because the prior art does not teach a method of designing a logic circuit to provide a predetermined logical operation, the method including the steps of: performing logic synthesis for the predetermined logical operation to produce an intermediate circuit, the logic synthesis being performed utilizing a synthesis library constrained to the logic synthesis block; eliminating unused devices in the intermediate circuit to produce a final circuit; and sizing the devices in the final circuit, and with the combination of all other features corresponding to the independent claims.

2. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".

Art Unit: 2825

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Binh C. Tat whose telephone number is (703) 305-4855.

The examiner can normally be reached on 7:30 - 4:00 (M-F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Mathew Smith can be reached on (703) 308-1323. The fax phone number for

the organization where this application or proceeding is assigned is 571 273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For

more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free).

/Tat Binh/

Patent Examiner

February 13, 2008

/Jack Chiang/

Supervisory Patent Examiner, Art Unit 2825

Application Number

Application/Control No.	Applicant(s)/Patent under Reexamination
09/915,437	DHONG ET AL.
Examiner	Art Unit
   BINH C. TAT	2825

U.S. Patent and Trademark Office Part of Paper No. 20080213